

Docket No.: AUTOB.059A

App. No.: 09/283,120

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In re application of : Kevin J. Wagoner, et al.  
Appl. No. : 09/283,120  
Filed : March 31, 1999  
For : CONTINUOUS ONLINE  
AUCTION SYSTEM AND  
METHOD  
Examiner : Hani M. Kazimi  
Art Unit : 3624

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(Date)

*Ted M Cannon*  
Ted M. Cannon, Reg. No. 55,036

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Commissioner for Patents

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Transmitted herewith is Applicant's Amended Appeal Brief to the Board of Patent Appeals:

- (X) If applicant has not requested a sufficient extension of time and/or has not paid any other fee in a sufficient amount to prevent the abandonment of this application, please consider this as a Request for an Extension for the required time period and/or authorization to charge our Deposit Account No. 11-1410 for any fee which may be due. Please credit any overpayment to Deposit Account No. 11-1410.
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AUTOB.059A

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

**Applicant** : Kevin J. Wagoner, et al.  
**Appl. No.** : 09/283,120  
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CERTIFICATE OF MAILING

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APPLICANT'S AMENDED APPEAL BRIEF

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This Amended Appeal Brief is submitted in response to the Notification of Non-Compliant Appeal Brief mailed on September 26, 2005. The Applicants appeal to the Board of Patent Appeals and Interferences from the Final Rejection of the above-referenced Application as set forth in the Office Action mailed May 28, 2004. Fees for this appeal were submitted with the original Appeal Brief. However, should any additional fees be necessary, please charge them to our Deposit Account No. 11-1410.

**I. BACKGROUND**

On May 28, 2004, the Examiner mailed a Final Office Action, in which the Examiner rejected the claims that are the subject of this appeal. However, the Examiner indicated that Claims 53 and 54 would be allowable if rewritten in independent form. Accordingly, the Applicants filed an amendment on July 28, 2004, to take the subject matter of allowable Claims 53 and 54. Because Claim 53 was a multiple-dependent claim, the Applicants added new Claims 55 and 56 in order to retain the scope of Claims 53 and 54. The Examiner, however, did not

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enter the July 28, 2004 amendment. Believing that the amended claims are identical in scope to the allowable Claims 53 and 54, Applicants filed a Request for Reconsideration on November 12, 2004. The Examiner nevertheless has not entered the Applicants' July 28, 2004 amendment.

Accordingly, Applicants filed this appeal because the Examiner did not enter (and accordingly did not allow) Claims 54-57 of the July 28, 2004 amendment, even though these claims are identical in scope to allowable Claims 53 and 54. Claims 53 and 54 are technically not involved in this appeal because they do not stand rejected. While Applicants believe that Claims 38-40 are patentable, Applicants believe that this appeal could have been avoided by the allowance of Claims 54-57.

## **II. RESPONSE TO THE NOTICE OF NON-COMPLIANT APPEAL BRIEF**

Herein, Applicants have fully responded to the Examiner's objections to the originally-filed appeal brief:

Section VII, entitled "Summary of Claimed Subject Matter," provides a concise explanation of the subject matter defined in each of the independent claims involved in the appeal. Applicants have added references to the specification, including page numbers and line numbers.

Appendix B, entitled "Evidence," contains copies of all evidence relied upon by the Applicants in this appeal, along with a statement setting forth where in the record the evidence was entered by the Examiner.

Appendix C, entitled "Decisions in Related Appeals and Interferences," indicates that Applicants have not provided copies of court or Board decisions from related appeals or interferences because Applicants are unaware of any related appeals or interferences.

## **III. REAL PARTY-IN-INTEREST**

The real party-in-interest in this appeal is the Assignee, Autobyte.com, Inc.

## **IV. RELATED APPEALS AND INTERFERENCES**

Applicants are unaware of any related appeals or interferences.

## **V. STATUS OF THE CLAIMS**

Claims 38-40, 53, and 54 are pending in this Application. Claims 1-37 and 41-52 have been withdrawn and are thus not at issue in this appeal. Claims 38-40 have been finally rejected. Because the Examiner did not finally reject Claims 53 and 54 but indicated that they would be

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allowable if rewritten in independent form, Claims 53 and 54 are not at issue in this appeal. In accordance with 37 C.F.R. § 1.192(c)(9), a copy of the claims involved in this appeal is included in the Appendix attached hereto.

#### **VI. STATUS OF AMENDMENTS**

Applicants filed an amendment on July 28, 2004, subsequent to the Final Office Action. In this amendment, Applicants canceled all of the claims rejected by the Examiner and rewrote Claims 53 and 54 in independent form. The Examiner had indicated in the Final Office Action that Claims 53 and 54 would be allowable if rewritten in independent form. Because Claim 53 was a multiple-dependent claim, the Applicants added new Claims 55 and 56 in order to retain the scope of Claims 53 and 54.

The Examiner did not enter the July 28, 2004 amendment. Instead, the Examiner mailed an Advisory Action on October 12, 2004 stating that the July 28, 2004 amendment did not place the application in condition for allowance. Applicants filed a Request for Reconsideration of this Advisory Action on November 12, 2004. The Examiner has not responded to the Request for Reconsideration. Because Applicants' July 28, 2004 amendment has not been entered, the claims at issue in this appeal are Claims 38-40 as they stood at the time of the May 28, 2004 Final Office Action.

#### **VII. SUMMARY OF CLAIMED SUBJECT MATTER**

The following paragraph summarizes the invention of Claims 38-40 only and does not limit other inventions that may later be claimed in the present application or in one or more continuation or divisional applications.

The invention of Claims 38-40 is an improvement of conventional computerized bidding systems. *See* Specification at page 2, lines 14-24 (providing a general discussion of conventional computerized bidding systems). Such bidding systems conventionally have accepted a single bid value from each bidder. *See* United States Patent No. 5,835,896 to Fisher et al. Some such systems have employed "proxy" bidding, in which the single bid entered by the bidder is a "maximum" bid. *Id.* Conventional "proxy" bidding systems have automatically bid on behalf of the bidder, gradually incrementing the bidder's bid up to the maximum bid entered by the bidder. *Id.*

In contrast to such single bid bidding systems, the invention of Claims 38-40 allows each bidder to enter a bid that includes two bid values instead of just one bid value. Specification at page 4, line 26 through page 5, line 20; page 6, lines 5-23; and page 10, lines 6-23. Allowing a bidder to enter two bid values instead of just one increases the bidder's flexibility and control over the bidding process. The fact that the invention of Claims 38-40 allows the user to enter two bid values instead of just one with each bid is captured in the following limitation that a "first bid data includes a **first bid and a second bid**, said first bid is greater than said current high bid value, and said second bid is greater than said first bid." Claim 38 (emphasis added).

The independent Claims 38 and 40 do not include means-plus-function or step-plus-function limitations.

#### **VIII. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

This appeal presents the issue as to whether the Examiner erred by concluding that United States Patent No. 5,835,896 to Fisher et al. teaches a bidding system in which each bidder can enter two bid values with each bid. If the Fisher patent teaches a bidding system in which each bidder can enter only one bid value with each bid, then the Examiner improperly rejected Claims 38-40 under 35 U.S.C. § 102(e) and such anticipation rejections should be reversed.

#### **IX. GROUPING OF THE CLAIMS**

The Examiner has organized Claims 38-40 into a single group. The Examiner rejected Claims 38-40 as anticipated under 35 U.S.C. § 102(e) by United States Patent No. 5,835,896 to Fisher et al.

According to 37 C.F.R. § 1.192(c)(7), the Board of Patent Appeals and Interferences may "select a single claim" from each group and analyze the rejection for that group "on the basis of that claim alone" unless the applicant asserts that "the claims of the group do not stand or fall together" and the applicant explains why the individual claims of the group are separately patentable.<sup>1</sup>

Applicants believe that Claims 38-40 do not stand or fall together; rather, each claim presents distinct issues concerning patentability. However, Applicants have decided not to present arguments as to the independent ground of patentability for each claim because this would unnecessarily complicate the issues on appeal. Thus, in accordance with the requirements

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<sup>1</sup> See also M.P.E.P. § 1206.

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of the C.F.R. and the M.P.E.P., Applicants will maintain the grouping set forth by the Examiner, but only for purposes of this appeal, and only with respect to the specific grounds of rejection raised by the Examiner in connection with the Fisher et al. patent. This grouping is not intended to be, and should not be construed as, an admission or concession that the grouped claims are not patentably distinct. Applicants expressly reserve the right to assert in later proceedings the independent patentability of each claim over the prior art of record on this appeal and/or any other prior art.

### **X. ARGUMENT**

The Examiner rejected Claims 38-40 as being anticipated under 35 U.S.C. § 102(e) by United States Patent No. 5,835,896 to Fisher et al. In order to anticipate the claimed invention, the Fisher patent must teach every limitation of the claimed invention. The Examiner has not met his burden to show that the Fisher patent teaches every limitation of the claimed invention. Specifically, the Examiner has not shown that the Fisher patent teaches the limitation that a “first bid data includes **a first bid and a second bid**, said first bid is greater than said current high bid value, and said second bid is greater than said first bid.” Claim 38 (emphasis added).

This limitation that a “first bid data includes a first bid and a second bid” means that the claimed invention is a bidding system in which each user is allowed to enter two bid values, not just one, with each bid. The Fisher patent, on the other hand, teaches a form of computerized proxy bidding in which a computer user may enter a maximum bid that he or she is willing to pay for a product being auctioned. The Fisher system maintains a system minimum bid, which is the lowest bid that a user may enter. The computer enters bids on behalf of each user, but only up to the maximum value that the user is willing to pay. Using the Fisher system, a user may enter **just one bid value**, representing the maximum value that the user is willing to pay.

Specifically, Figure 3 of the Fisher system illustrates a form upon which a user enters his or her bid. Fisher patent, Figure 3. The form has only one field for accepting a bid value from a user. *Id.* That one field is labeled “Bid (price not to exceed)” on Figure 3. *Id.* Further, the label on Figure 3 that says “Minimum Bid: \$1.00” is not a bid entered by a user. Rather, this label is an informational field that simply informs the user of the minimum bid that the Fisher system will accept. Further, even the paragraph of the specification cited by the Examiner, Column 9, lines 17 et seq. teaches the entry of a single bid value, stating that:

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a proxy bid is a special bid type that allows auction manager 26 to **automatically bid on the bidder's behalf up to a limited amount established by the bidder when his or her initial bid is placed. The auction manager will increase the bid as necessary up to the limit amount.** This feature allows the customer to get the lowest possible price without exceeding a limit preferably established when the bid is entered.

Fisher patent, Col. 17: 19-25 (emphasis added). Far from teaching a system in which the user enters two bid values with each bid, the foregoing paragraph teaches a system in which the user enters only a maximum bid value and the system, not the user, automatically places intermediate bids on the user's behalf.

Accordingly, the Examiner did not show that the Fisher patent teaches every limitation of Claims 38-40. Specifically, the Examiner did not show that the Fisher patent teaches an auction system in which a user enters in a single "bid data" both "a first bid and a second bid, said first bid is greater than said current high bid value, and said second bid is greater than said first bid."

Because the Fisher patent does not teach every limitation of Claims 38-40, the Examiner improperly rejected Claims 38-40 as anticipated by the Fisher patent.

#### **XI. CONCLUSION**

Nothing in the prior art, individually or in combination, discloses, teaches, or suggests the invention recited by the claims on appeal. Accordingly, Applicants respectfully request that the Examiner's rejections be reversed and that Claims 38-40 be passed to issuance. Applicants note that while Claims 53 and 54 are not at issue in this appeal because they have not been finally rejected, Claims 53 and 54 depend from Claims 38-40 and therefore should also be passed to issuance upon reversal of the Examiner's rejections of Claims 38-40.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 10/26/2005

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**APPENDIX A: CLAIMS AT ISSUE IN THIS APPEAL**

38. An online product auction system comprising an auction center, said auction center includes a microprocessor operably connected to a storage media, said product auction system comprising:

a current high bid value for a first product;

a first bid data for said first product, said first bid data includes a first bid and a second bid, said first bid is greater than said current high bid value, and said second bid is greater than said first bid;

a second bid data for said first product, said second bid data includes a third bid and a fourth bid, said third bid is greater than said current high bid value, and said fourth bid is greater than said third bid; and

a bid processing module which calculates and updates said current high bid for said first product.

39. The auction system as defined in Claim 38, wherein said bid processing module further comprises:

a first calculation mode which calculates said high bid for said first product when said product auction system is in a first state; and

a second calculation mode which calculates said high bid for said first product when said product auction system is in a second state.

40. An online product auction system comprising an auction center, said auction center includes a microprocessor operably connected to a storage media, said product auction system comprising:

a current high bid for a first product, said current high bid is associated with a first bid data wherein said first bid data includes a first bid and a second bid, said first bid is greater than said current high bid, and said second bid is greater than said first bid; and

a second bid data for said first product, said second bid data includes a third bid and a fourth bid, said third bid is greater than said current high bid, and said fourth bid is greater than said third bid.



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**APPENDIX B: EVIDENCE**

In their Appeal Brief, Applicants cite to the Specification of the application and to United States Patent No. 5,835,896 to Fisher et al. The Examiner first cited the Fisher patent in the Office Action mailed August 20, 2001. The Examiner cited the Fisher patent against the claims that are the subject of this appeal in the Final Office Action mailed May 28, 2004.

Copies of the Specification, the Fisher patent, and the Final Office Action mailed May 28, 2004, are enclosed herewith.

**CONTINUOUS ONLINE AUCTION SYSTEM AND METHOD**Related Applications

The present application is related to the co-pending and commonly owned U.S. Patent application entitled REAL TIME COMMUNICATION OF PURCHASE REQUESTS having the application number 09/231,049 and the filing date of January 14, 1999, and which is hereby incorporated herein by reference in its entirety.

BackgroundField

The present invention is related to systems and methods for conducting transactions using networked computers. More particularly, the invention relates to a system and method for performing an online auction.

Description of the Related Art

Traditional auctions usually require the physical gathering of the products and the bidders at a predetermined location. An auction is scheduled to occur at a specific location at a scheduled time. Typically, interested bidders show up at the location prior to the scheduled auction time to inspect the items to be auctioned off. The bidders then attend the auction, wait for the interested products to be auctioned, and bid on these interested products.

At these traditional auctions, the products are disadvantageously made available to the interested bidders for a limited duration prior to the scheduled auction. During this limited time, the interested bidder has the task of inspecting the products which are of interest and to "book out" the product one at a time. Typical auctions may involve hundreds of products, and determining a value for each product in such a short period of time is inherently inefficient. Moreover, requiring the products to be transported to the auction location adds increased inefficiencies in the distribution channel between the seller and the buyer.

Traditional auctions have the further disadvantage that products are generally auctioned off one at a time. The auctioneer typically places a product up for auction and solicits bids from the auction floor. Once the highest bid is accepted, the product is closed to further bidding, and the next product is brought forward. This process of auctioning off

one product at a time in a sequential manner is limiting because the interested bidder may have to wait through the entire auction in order to place a bid on the interested products. Moreover, because of the high number of products and the limited auction time, a product is presented for auction for only a very short period of time. Thus, a potential bidder is not  
5 afforded the luxury of time in deciding whether to place a bid.

At some auctions, more than one auctioneer is active at a time, and thus, more than one product is capable of being auctioned off at a time. This is more efficient in that more products may be auctioned off in a lesser period of time. But, simultaneous auctions require the interested bidder to concurrently monitor more than one auction to ensure that  
10 an interested product is not missed. This is inefficient because more than one bidder representing the same buyer has to be present at the auction. Further inefficiencies are introduced because the products cannot be auctioned off simultaneously to the same group of bidders.

More recently, the World Wide Web ("www") has experienced an increasing  
15 number of auction sites. Typically, a seller places a product up for auction through one of these sites. The seller provides information such as, by way of example, a product description, including a photograph of the product in some instances, the duration of the auction, and possibly a required minimum selling price. This information is presented through one or more web pages. A bid history is also presented through one or more web  
20 pages so that interested bidders may place a valid bid on a desired product.

These auction systems enable the simultaneous auctioning of products as well as increasing the duration of time a product is presented for auction. But, conventional auction systems are inefficient because the participating bidders have to continuously monitor their auctions in order to keep abreast of the bidding activity. Furthermore, these  
25 systems have the added disadvantage in that the interested bidders have to continuously search for active auctions involving products of interest.

Having placed a product up for auction, the seller generally loses the flexibility of altering certain auction parameters during the auction period. For example, the seller may not be permitted to alter information such as the bidding increments, the minimum starting  
30 bid, or the minimum acceptable selling bid. This is generally inefficient because the seller has to wait through an unsuccessful auction before adjusting the auction parameters such

that a successful auction may result.

#### Summary

In one embodiment of the invention, an online product auction system facilitates an efficient utilization of both the seller's and bidder's resources during a vehicle auction.

5 The online product auction system comprises: (1) an auction center having a microprocessor operably connected to a storage media; (2) a product receive module configured to execute in the auction center, the product receive module configured to receive a first product data associated with a first product to be auctioned wherein the first product data includes one or more seller parameters; and (3) a seller proxy module

10 configured to execute in the auction center, the seller proxy module configured to modify the one or more seller parameters such as the start minimum bid based upon one or more auction parameters for the first product such as how many bids have been received. In one aspect of the embodiment, the auction center is configured to be connected to a network and the first product data is received over the network. In another aspect of the

15 embodiment, the seller proxy module executes substantially on the hour every hour. In yet another aspect of the embodiment, the seller proxy module executes based on a seller provided time interval. In a further aspect of the embodiment, the first product data is received over a network.

In another embodiment, a method of auctioning a first product, the first product

20 associated with one or more seller parameters, the first product associated with one or more auction parameters, comprises the acts of: (1) receiving the one or more seller parameters from a first seller; and (2) modifying the one or more seller parameters based upon the one or more auction parameters. In one aspect of the embodiment, the one or more seller parameters includes a start minimum bid. In another aspect of the

25 embodiment, the one or more seller parameters includes a reserve bid. In yet another aspect of the embodiment, the one or more seller parameters includes a decrement amount. In a further aspect of the embodiment, the one or more seller parameters includes a low minimum bid. In yet a further aspect of the embodiment, the one or more seller parameters includes a low reserve bid. In still a further aspect of the embodiment, the one

30 or more auction parameters includes a bid count. In another aspect of the embodiment, the modifying is based on a time interval, the time interval is dynamically determined.

In yet another embodiment, a seller proxy system comprises: (1) a means for receiving a first product data associated with a first product, the first product data includes one or more seller parameters; (2) a means for determining one or more auction parameters for the first product; and (3) a means for modifying the one or more seller parameters based upon the one or more auction parameters for the first product.

In still another embodiment, a method of calculating a current high bid for a first product in an auction center, wherein the auction center includes a microprocessor operably connected to a storage media, the auction center configured to be operably connected to at least one buyer terminal, comprises the acts of: (1) receiving a first bid for the first product from a first bidder, the first product is associated with a start minimum bid; and (2) setting the current high bid to the start minimum bid when a first condition is met. In one aspect of the embodiment, the current high bid is set equal to the first bid when a second condition is met. In another aspect of the embodiment, the first bid is received from the buyer terminal. In yet another aspect of the embodiment, the auction center is configured to be operably connected to a network. In still another aspect of the embodiment, the network is the Internet.

In a further embodiment, an online product auction system comprises: (1) an auction center having a microprocessor operably connected to a storage media, the auction center configured to be connected to a network, the auction center configured to receive at least a first bid for a first product from a first bidder, wherein the first product is associated with a start minimum bid; and (2) a bid processing module operably connected to the storage media and configured to execute in the auction center, the bid processing module sets a current high bid to the start minimum bid when a first condition is met. In one aspect of the embodiment, the current high bid is set equal to the first bid when a second condition is met.

In a yet a further embodiment, a method for proxy bidding in an auction center, wherein the auction center includes a microprocessor operably connected to a storage media, comprises the acts of: (1) receiving a first bid and a second bid for the first product from a first bidder, the second bid is at least as large as the first bid; (2) receiving a third bid and a fourth bid for the first product from a second bidder, the fourth bid is at least as large as the third bid; and (3) setting a current high bid to be larger than the third bid when

the first bid is smaller than the third bid and the fourth bid is smaller than the second bid. In one aspect of the embodiment, the method for proxy bidding further comprises the acts of: (1) receiving a first proxy increment from the first bidder; and (2) setting the current high bid to be larger than the third bid by the first proxy increment. In another aspect of the embodiment, the current high bid is set to the third bid plus a proxy increment.

5 In still a further embodiment, a method for calculating a current high bid for a first product in an auction center comprises the acts of: (1) receiving a first bid data for the first product, the first bid data includes a first bid and a second bid; (2) receiving a second bid data for the first product, the second bid data includes a third bid and a fourth bid; and (3)  
10 setting a current high bid for the first product to be larger than the smaller of the second bid and the fourth bid when a first condition is met. In one aspect of the embodiment, the current high bid is set to the sum of a proxy increment and the smaller of the second bid and the fourth bid when a first condition is met. In another aspect of the embodiment, the current high bid is set to the second bid when a second condition is met. In yet another  
15 aspect of the embodiment, the current high bid is set to the first bid when a third condition is met. In still another aspect of the embodiment, the current high bid is set to the third bid when a fourth condition is met. In a further aspect of the embodiment, the current high bid is set to the fourth bid when a fifth condition is met. In yet a further aspect of the embodiment, the calculating includes comparing a receive time for the first bid data and a  
20 receive time for the second bid data.

In one embodiment, a method for calculating a new high bid for a first product from a current high bid for the first product and a subsequent bid data for the first product, the current high bid is associated with a current high bid data wherein the current high bid data includes a first bid and a second bid, the current high bid at least as large as the first  
25 bid, the current high bid less than or equal to the second bid, comprises the acts of: (1) receiving the subsequent bid data for the first product, the subsequent bid data includes a third bid and a fourth bid, the fourth bid at least as large as the third bid; and (2) setting the new high bid to a value larger than the fourth bid when a first condition is met. In one aspect of the embodiment, the new high bid is larger than the fourth bid by a proxy  
30 increment. In another aspect of the embodiment, the new high bid is set to a value larger than the second bid when a second condition is met. In yet another aspect of the

embodiment, the new high bid is larger than the second bid by a proxy increment. In still another aspect of the embodiment, the new high bid is set to the fourth bid when a third condition is met. In a further aspect of the embodiment, the new high bid is set to the current high bid when a fourth condition is met.

5           In another embodiment, an online product auction system comprising an auction center, the auction center includes a microprocessor operably connected to a storage media, comprises: (1) a first bid data for a first product, the first bid data includes a first bid and a second bid, the second bid is at least as large as the first bid; (2) a second bid data for the first product, the second bid data includes a third bid and a fourth bid, the fourth bid  
10           is at least as large as the third bid; and (3) a bid processing module which calculates a high bid for the first product. In one aspect of the embodiment, the bid processing module further comprises: (1) a first calculation mode which calculates the high bid for the first product when the product auction system is in a first state; and (2) a second calculation mode which calculates the high bid for the first product when the product auction system is  
15           in a second state.

          In yet another embodiment, an online product auction system comprising an auction center, the auction center includes a microprocessor operably connected to a storage media, comprises: (1) a current high bid for a first product, the current high bid is associated with a first bid data wherein the first bid data includes a first bid and a second  
20           bid, the second bid is at least as large as the first bid; (2) a second bid data for the first product, the second bid data includes a third bid and a fourth bid, the fourth bid is at least as large as the third bid; and (3) a bid processing module which calculates a new high bid for the first product.

          In still another embodiment, a method of consummating a sale of a first product in  
25           an auction center comprises the acts of: (1) determining a winning bidder; (2) informing an escrow provider of the sale, the escrow provider consummates an exchange of the first product and the winning bid; (3) receiving confirmation of the exchange from the escrow provider; and (4) removing the sale from the auction center.

          In a further embodiment, an online product auction system comprising an auction  
30           center, the auction center includes a microprocessor operably connected to a storage media, comprises: (1) a bid processing module which determines a winning bidder for a

first auction; (2) an escrow module which informs an escrow service provider of a result of the first auction, the result includes a first product, the result includes a seller of the first product, the result includes a winning bid for the first product, the result includes a winning bidder of the first product; and (3) a sale finalize module which receives a confirmation of an exchange of the first product and the winning bid between the seller and the winning bidder; the sale finalize module removes the first auction from the auction center.

In yet a further embodiment, a method of searching one or more auctions in an auction center, the auction center includes a microprocessor operably connected to a storage media, the auction center configured to be operably connected to at least one user terminal, comprises the acts of: (1) receiving one or more filtering parameters; (2) identifying the one or more auctions that satisfy the one or more filtering parameters; and (3) displaying one or more auction data for the one or more identified auctions in a scrolling ticker on a user terminal, the one or more auction data is a hypertext link to a first web page associated with the action data.

In still a further embodiment, an event notification method in an auction center comprises the acts of: (1) receiving a first product from a seller, the first product is associated with a first product auction; (2) receiving one or more auction events for the first product auction from the seller; and (3) notifying the seller upon the occurrence of the one or more auction events.

In one embodiment, an event notification method in an auction center, the auction center includes a first product auction for a first product, comprises the acts of: (1) receiving a first bid for the first product in the first product auction from a bidder; (2) receiving one or more bid events for the first product auction from the bidder; and (3) notifying the bidder upon the occurrence of the one or more bid events.

In another embodiment, an auction notification method in an auction center comprises the acts of: (1) receiving one or more auction search criteria from a potential bidder; (2) receiving one or more products, the one or more products associated with one or more product auctions, wherein the one or more product auctions are in a first state; (3) identifying the one or more product auctions that satisfy the one or more auction search criteria, the identifying performed when the one or more product auctions transitions to a



second state; and (4) notifying the potential bidder of the one or more identified product auctions.

#### Brief Description of the Drawings

5 These and other aspects, advantages, and novel features of the invention will become apparent upon reading the following detailed description and upon reference to accompanying drawings in which:

Figure 1 is a block diagram illustrating an embodiment of the overall network architecture of the invention;

10 Figure 2 is a flow chart illustrating a vehicle submission process according to one embodiment of the invention;

Figure 3 is a flow chart illustrating the vehicle auction states according to one embodiment of the invention;

15 Figure 4 is a flow chart illustrating a current high bid calculation in a vehicle auction transitioning from a preview state to an active state according to one embodiment of the invention; and

Figure 5 is a flow chart illustrating a current high bid calculation in an active vehicle auction according to one embodiment of the invention.

#### Detailed Description

20 In one embodiment, an online product auction system includes an auction center. The auction center provides a network connection to which one or more seller terminals and one or more buyer terminals, as well as other network devices, may advantageously be networked. The auction center may advantageously utilize a web server to provide a network connection over a public network such as the World Wide Web ("www") or a private network. The auction center includes information regarding one or more products  
25 and facilitates the auctioning of the products by enabling potential buyers of the products to bid on the products by utilizing the buyer terminal.

Several modules will be described hereafter. The modules may advantageously be implemented as one or more computer program modules configured to reside on an addressable storage medium operably connected to one or more microprocessors. The  
30 modules may advantageously be configured to execute on the one or more microprocessors. An addressable storage medium will be further described below.

The auction center advantageously receives one or more products from one or more sellers. As an example, a seller may use a seller terminal to submit a product into the auction center. A product is associated with a corresponding set of product data and one or more auction parameters. The corresponding set of product data and one or more auction parameters can be considered a product auction. The set of product data may advantageously include information such as, by way of example, a product identification and one or more seller parameters such as a seller identification, a start minimum bid, a reserve bid, a decrement amount, and a low minimum bid. The auction parameter may be information such as, by way of example, a current high bid, a current high bidder, a start time, an auction timer, a bid count, a winning bid, and a winning bidder. The auction center can facilitate a product auction by utilizing information maintained in the seller parameters and one or more auction parameters.

In one embodiment, a seller proxy module executes in the auction center and may advantageously perform a seller proxy based upon one or more auction parameters. The seller proxy modifies one or more seller parameters during the product auction on behalf of the seller. As an example, the auction center may lower a start minimum bid if there are no bids in the product auction. Thus, in contrast to conventional auctions, the seller does not have to wait until a product auction completes unsuccessfully before re-auctioning the product with modified seller parameters. The auction center can monitor the product auction and modify one or more seller parameters associated with the product auction to increase the probability of a successful product auction.

A seller may advantageously request the auction center to notify the seller upon the occurrence of an event associated with the seller's product auction. The events may advantageously include one or more of the following: a transition from one product auction state to another product auction state, a seller proxy, a successful product auction, and a receipt of a bid. The seller may further specify the form the notification is to take place. Thus, the seller does not have to expend resources to unnecessarily monitor the seller's product auction. Rather, the auction center can be configured to automatically notify the seller accordingly, thus enabling the seller to make better use of the seller's resources.

A bidder uses a buyer terminal and a web browser executing on the buyer terminal

to establish a connection over the network to the auction center. Once connected, the auction center advantageously displays a web page which the bidder can use to log on to and navigate through the auction center to locate a desired product auction. The bidder can then place a proxy bid in the desired product auction using the one or more web pages displayed on the buyer terminal.

A bid processing module executes in the auction center and processes an incoming bid in a product auction contained in the auction center. More particularly, the bid processing module is configured to accept a proxy bid request in the product auction from a bidder. The proxy bid request may include bid parameters such as, by way of example, an initial bid and a top bid. The initial bid and the top bid are used by the bid processing module to perform proxy bids on behalf of the bidder. The initial bid is the bidder's first bid for the product. The top bid is a cap figure that the bid processing module is not to exceed in generating a proxy bid. The bid processing module will then advantageously bid on behalf of the bidder if a subsequent bidder places a higher bid in the product auction. The bid processing module generates a proxy bid on behalf of the bidder as long as the higher bid submitted by the subsequent bidder does not exceed the top bid specified by the bidder. In another embodiment, the bidder may further specify a bid increment to be used by the bid processing module in generating a proxy bid on the bidder's behalf. In yet another embodiment, the bidder may further specify a time parameter which is used in delaying the bidder's proxy bids. As an example, the bidder may specify that his or her proxy bids are to be submitted ten (10) minutes after a subsequent higher bid is received from a different bidder. As another example, the bidder may specify that his or her proxy bids are to be submitted twenty (20) minutes before the close of the auction.

In one embodiment, if the top bid specified by the bidder is insufficient for the bid processing module to generate a proxy bid on behalf of the bidder, the auction center is advantageously configured to alert the bidder of the insufficient top bid. As an example, the auction center may alert the bidder by sending an e-mail message. Once alerted, the bidder may place a subsequent bid, or another proxy bid, in the desired product auction. Thus, in contrast to conventional auctions, the bidder does not have to continuously monitor the product auction to determine if the bidder has been outbid. The auction center permits the bidder to effectively specify a range of bids that are acceptable to the bidder by

placing a proxy bid. The lowest possible bid in the range of bids becomes the bidder's effective bid. The auction center can advantageously monitor the product auction for the bidder and place subsequent bids when necessary on behalf of the bidder. Furthermore, the auction center may advantageously alert the bidder if a subsequent bid is higher than the range of bids specified by the bidder thus precluding the auction center from placing a proxy bid on behalf of the bidder. Thus, rather than the bidder having to expend resources to monitor interested product auctions, the auction center facilitates a better utilization of the bidder's resources.

Even though the invention is suitable for auctioning any product, the invention will be further disclosed in the context of auctioning a vehicle. Throughout the drawings, components which correspond to components shown in previous figures are indicated using the same reference numbers.

The conventional vehicle auctions are inherently inefficient. Typically, a vehicle auction provider establishes a date, time, and location for a vehicle auction. The vehicles to be auctioned off, which may number in the thousands, are transported to the auction site in preparation for the vehicle auction. The interested buyers gather at the auction site one or two days prior to the scheduled auction to inspect, and "book out," the vehicles one vehicle at a time. At this time, the potential buyers select the vehicles of interest, and initially associate a bid value to the selected vehicles.

The actual auction typically includes one or more auction lines. The vehicles are lined up, one after another, at one end of the auction line. The vehicles then proceed down the auction line. When a vehicle reaches a designated point on the auction line, typically the end of the auction line, the vehicle is put up for bidding. The bidding process typically takes no more than a few minutes. At the close of the bidding, the vehicle proceeds off the line, and the subsequent vehicle proceeds forward, and is put up for bidding. The potential buyers stand on both sides of the auction line and place bids as the vehicles are put up for bidding. For each auction line, one vehicle can be put up for bidding at a given time. Therefore, if the auction involved three auction lines, there could be three vehicles up for bidding simultaneously. Accordingly, it is not uncommon for several bidders representing one entity to be attending a single vehicle auction in order to adequately cover the multiple auction lines. Thus, the conventional vehicle auction typically generates a high degree of

tension in that the vehicles are auctioned off in rapid succession. Furthermore, the potential buyers may not have enough time to make proper bidding decisions.

Conventional electronic vehicle auctions, conducted using computers and dial-up connections, address some, but not all, of the problems associated with the conventional vehicle auctions. Typically, a vehicle auction provider sets the time and location for a vehicle auction. Potential buyers are thus alerted to dial into and log on to a particular location, generally a computer system executing an auction program, to participate in the vehicle auction. The vehicles to be auctioned off may be made available for inspection at a designated time prior to the scheduled vehicle auction. The inspection is typically performed over the dial-up connection, whereby a potential buyer inspects the vehicles by accessing vehicle descriptions, and possibly vehicle photographs, from a remote computer.

At the scheduled auction time, the vehicles proceed down an "electronic auction line" one vehicle at a time. The potential buyers are informed by the conventional auction system as the vehicles proceed down the electronic auction line. Much like the traditional auction, a vehicle is put up for bidding once it reaches a specific point on the electronic auction line. The bidding takes place over the computer network as potential buyers submit bids for the vehicle. The bidding process for a vehicle generally takes no more than a few minutes. Thus, conventional electronic vehicle auctions, while alleviating the need for the potential buyer to be physically at the auction site, fail to address the tension and inefficiency associated with the need to closely monitor the vehicles proceeding down the auction line and make split second bidding decisions. During the electronic vehicle auction, a potential buyer cannot divert his or her attention to any other task but the vehicle auction itself. Furthermore, vehicles which were not purchased during the auction, generally because they failed to generate the necessary bidding activity, typically are allocated for participation in another vehicle auction. The electronic vehicle auction system, because of the time limitation, does not provide a mechanism by which auction parameters may be modified while a vehicle is up for bidding in an effort to generate the necessary bidding interest.

In contrast to the conventional vehicle auctions, the present invention facilitates an efficient allocation of resources. A potential buyer may advantageously focus his or her attention on tasks other than the vehicle auction by requesting the vehicle auction system

to perform one or more tasks on behalf of the potential buyer. As an example, the vehicle auction system can monitor the bidding activity and submit proxy bids on behalf of the potential buyer. Additionally, the vehicle auction system can notify the potential buyer of certain events, thus permitting the potential buyer to tend to other duties until attention is  
5 needed. A seller of a vehicle through a vehicle auction may likewise request the vehicle auction to perform one or more tasks on behalf of the seller. As another example, the seller may advantageously request the vehicle auction to perform one or more seller proxies on the seller's behalf. The vehicle auction can accordingly monitor the bidding activity associated with the vehicle auction and adjust one or more seller parameters to  
10 increase the probability of a vehicle sale.

In one embodiment of the invention, an online product auction system facilitates the auctioning of a vehicle. The product auction system provides a network connection with which a seller can access the product auction system over the network to submit a vehicle to be auctioned off by the product auction system. The product auction system  
15 offers the submitted vehicle in a vehicle auction. A potential buyer can access the product auction system through the network connection to place one or more bids in a vehicle auction.

Computer networks suitable for use with the present invention include local area networks (LAN), wide area networks (WAN), Internet, or other connection services and  
20 network variations such as the World Wide Web, the public internet, a private internet, a private computer network, a secure internet, a private network, a public network, a value-added network, and the like. The computers connected to the network may be any microprocessor controlled device that permits access to the network, including terminal devices, such as personal computers, workstations, servers, mini computers, main-frame  
25 computers, laptop computers, mobile computers, palm top computers, hand held computers, set top box for a TV, or a combination thereof. The computers may further possess input devices such as a keyboard or a mouse, and output devices such as a computer screen or a speaker. The computer network may include one or more LANs, WANs, Internets, and computers. The computers may serve as servers, clients, or a  
30 combination thereof.

One network architecture suitable for use with one embodiment of the invention is

indicated generally by a system 10 in Figure 1. The system 10 may include a network 102, which represents a computer network as previously described, providing network connection between the attached devices. The system 10 may further include an online product auction system 104 which is connectable by one or more buyer terminals and one or more seller terminals through a web server 114. The online product auction system 104, the buyer terminals, and the seller terminals may be connected to the network 102 directly or through a connection device such as a router or other similar mechanisms.

In one embodiment, the system 10 conforms to the Transmission Control Protocol/Internet Protocol (TCP/IP) industry standard. In other embodiments, the system 10 may conform to other network standards, including, but not limited to, the International Standards Organization's Open Systems Interconnection, IBM's SNA®, Novell's Netware®, and Banyon VINES®, that facilitate communication between the attached devices.

In one embodiment of the invention, the online product auction system 104 includes an auction center 106 and one or more storage mediums 108. The auction center 106 is operably connected to a storage media such as, by way of example, random access memory, non-volatile storage media, or the storage medium 108. The online product auction system programs and the online product auction system databases comprising the online product auction system 104 preferably reside on one or more computers, which is any device having a microprocessor operably connected to some storage memory device, comprising the auction center 106 and one or more storage mediums 108. Those of ordinary skill in the art will realize that the storage mediums 108 may advantageously be contained in the computer(s) comprising the auction center 106.

These computers may be uniprocessor or multiprocessor machines. Additionally, these computers include an addressable storage medium such as, by way of example, random access memory, and may further include a non-volatile storage medium such as, by way of example, a magnetic or an optical disk. The addressable storage medium and/or the non-volatile storage medium may advantageously contain a specific physical substrate configuration such as, for example, a computer program, representing data and instructions which cause the computer to operate in a specific and predefined manner as described herein.

The network 102 may connect devices, such as a user computer 110 or a user

laptop 112, for example, by use of a modem or by use of a network interface card. As illustrated, potential buyers and sellers may utilize such devices to remotely access the online product auction system 104 via the network 102. The device used to provide the buyer access to the online product auction system 104 and the auction center 106 may be referred to herein as a buyer terminal. The device used to provide the seller access to the online product auction system 104 and the auction center 106 may be referred to herein as a seller terminal. The terms buyer terminal and seller terminal are intended to include any device useful for providing access to the online product auction system 104. The buyer terminals and the seller terminals may also be referred to herein as user terminals. Moreover, the same device may function as both a buyer terminal and a seller terminal.

Although particular computer systems and network components are shown, those of ordinary skill in the art will appreciate that the present invention also works with a variety of other networks and components.

In accordance with one embodiment of the invention, the online product auction system 104 is connected to the Internet and utilizes the web server 114 to provide connection capabilities over a World Wide Web ("www"). The web server 114 may advantageously be executing a standard web server such as, by way of example, the Microsoft Internet Information Server. A remotely located potential buyer may access the online product auction system 104 by utilizing a standard web browser such as, by way of example, Netscape Communicator software, executing on a buyer terminal and establishing a network connection to the web server 114. Likewise, a remotely located seller may access the online product auction system 104 by utilizing a standard web browser executing on a seller terminal and establishing a network connection to the web server 114. Via the web server 114, the potential buyer and seller may advantageously be provided with web pages enabling the buyer and seller to access the online product auction system 104.

In one embodiment, the storage medium 108 may be configured as a database from which information can be both stored, updated, and retrieved. The information may advantageously include one or more of the following: product data, bid data, seller parameters, auction parameters, and definitions of one or more web pages comprising the online product auction system 104. The online product auction system programs may



provide access to the information stored on the storage medium 108.

Figure 2 is a flow chart generally illustrating a seller submitting a vehicle to the auction center 106 according to one embodiment of the invention. The subsequent steps may advantageously be implemented as one or more program modules configured to reside on one or more storage mediums 106 and execute on one or more processors residing in one or more auction centers 106. In particular, at a step 202, a potential seller utilizes a web browser executing on a seller terminal to access the auction center 106 login web page. The potential seller submits a login identification and a password pair through the login web page. In one embodiment, a unique login identification and password pair can be previously obtained from an auction center administrator. In another embodiment, the auction center 106 may include definitions of one or more web pages which may advantageously provide an online contract to the seller. The seller can then access and submit the online contract through the seller terminal and subsequently obtain a login identification and password pair with which to access the auction center 106.

At a step 204, the seller submits a vehicle to be auctioned off by the auction center 106. Each vehicle comprises a unique vehicle auction. In one embodiment, the seller can submit vehicles to the auction center 106 one vehicle at a time. Each vehicle can be identified by a set of product data stored in memory which is associated with the vehicle. The product data may advantageously be comprised of a vehicle identification and one or more seller parameters. A product receive module is configured to execute in the auction center 106 and receives the product data associated with the vehicle. In another embodiment, the seller may also submit one or more sets of product data into the auction center 106 from a database. As an example, the product data may be contained in a database of the type detailed in the co-pending and commonly owned U.S. Patent application entitled REAL TIME COMMUNICATION OF PURCHASE REQUESTS having the application number 09/231,049 and the filing date of January 14, 1999, and which is hereby incorporated by reference in its entirety. In particular, the database can be comprised of one or more used vehicle records detailed in the aforementioned patent application. Those of ordinary skill in the art will realize that the database may be local to the online product auction system 104 or remotely located, and thus, connected to the online product auction system 104 via the network 102.

At a post offer step 206, the seller provides the seller parameters that additionally comprise the product data associated with the vehicle. The seller parameters preferably are one or more of the following: a start minimum bid, a reserve bid, a decrement amount, and a low minimum bid. The start minimum bid is the amount the seller would like the bidding for the seller's vehicle to start at. The auction center 106 makes the start minimum bid specified by the seller available to a potential bidder. The low minimum bid and the decrement amount are parameters used by the auction center 106 in performing seller proxies on behalf of the seller and are not made known to potential bidders. Every time a seller proxy is performed, the start minimum bid is decremented by the decrement amount. The low minimum bid is a floor figure which the start minimum bid cannot be set smaller than. The reserve bid is a contractual figure in that the seller is promising to sell the vehicle if a winning bid is at least as much as the specified reserve bid. The specified reserve bid, as well as the decrement amount and the low minimum bid, are not made known to potential bidders. Some or all of the seller parameters may not be required, and the omitted seller parameters may be supplied by the online product auction system 104.

In one embodiment, the start minimum bid is the desired starting bid that the seller is requesting for the vehicle auction. In one embodiment, the auction center 106 can accept bids less than the start minimum bid for the vehicle auction. In another embodiment, the auction center 106 can be configured to not accept any bids less than the start minimum bid amount. The reserve bid is the amount for which the seller is willing to sell the vehicle. If a winning bid for the vehicle auction is less than the reserve bid specified, the seller may, but is not obligated to, sell the vehicle for the winning bid. In one embodiment, the reserve bid may be specified to be any amount. In another embodiment, the auction center 106 may require the reserve bid amount to be as large as the start minimum bid amount.

For example, in a vehicle auction, the seller may specify a start minimum bid of \$10,000 and a reserve bid of \$8,000. In this instance, it may be advantageous for the auction center 106 to accept bids less than the start minimum bid of \$10,000 in the vehicle auction. In one embodiment, the auction center 106 may advantageously accept bids less than the reserve bid of \$8,000. This may allow interest in the vehicle auction to build and may lead to additional bids in the vehicle auction. The seller is not disadvantaged because

the seller is not obligated to sell the vehicle for an amount less than the reserve bid of \$8,000. In another embodiment, the auction center 106 may require a bidder to submit a bid amount greater than the reserve bid of 8,000. If the bid amount is less than \$8,000, the auction center 106 can advantageously display an error message alerting the bidder of this fact. If the auction center 106 is configured to not accept bids less than the start minimum of \$10,000, then the reserve bid of \$8,000 may be rendered effectively meaningless, unless the seller has requested seller proxies, and the auction center 106 may advantageously set the reserve bid to the start minimum bid. In this instance, the auction center 106 may require the reserve bid to be as large as the start minimum bid. In still another embodiment, the start minimum bid may also function as the amount the seller is willing to sell the vehicle for. In this instance, the reserve bid may not be required.

In one embodiment, a seller proxy module is configured to execute in the auction center 106 and performs seller proxies on behalf of a seller. A seller proxy is an adjustment of one or more seller parameters associated with a vehicle auction in an active state. Vehicle auction states will be further discussed below. In one embodiment, the adjustment is advantageously based on whether a bid has been received in the vehicle auction. When the seller proxy module executes, it can determine if the vehicle auction has received any bids. If a bid has been received, the seller proxy module will not perform a seller proxy in the vehicle auction. If a bid has not been received, the seller proxy module can determine if the start minimum bid is larger than the sum of the low minimum bid and the decrement amount. If the start minimum bid is larger, then a seller proxy can be performed. As an example, a seller may advantageously specify a start minimum bid of \$8,000, a decrement amount of \$200, and a low minimum bid of \$7,000 in offering a vehicle for auction. If the vehicle auction has not received a bid, a seller proxy decrement will advantageously be performed, and the start minimum bid is decreased to \$7,800. In another embodiment, a seller proxy can be performed as long as the start minimum bid is larger than the low minimum bid and a bid in an amount equal to or greater than the reserve bid has not been received for the vehicle auction. If decreasing the start minimum bid by the decrement amount causes the start minimum bid to be smaller than the low minimum bid, then the start minimum bid will advantageously be set equal to the low minimum bid.

In one embodiment, the seller proxy module is executed by the auction center 106 at appropriate time intervals. The time interval may advantageously be predetermined by the auction center 106 and is substantially long enough to allow potential bidders to become aware of the vehicle auction and to submit bids in the vehicle auction. The time interval may not be too long such that the vehicle auction will close without generating the desired interest as measured by the number of bids. In one embodiment, the time interval is one (1) hour such that the proxy module is executed every one hour on the hour. In another embodiment, the time interval may be set to a figure substantially less than one (1) hour or substantially greater than one (1) hour. In still another embodiment, the time interval may be dynamically reduced by the auction center 106 based on the time remaining before the vehicle auction closes. In a further embodiment, the seller may specify, for a seller's vehicle auction, a time interval which determines the frequency the seller proxies are performed. In still a further embodiment, the seller may specify a variable time interval which determines the frequency in which seller proxies are performed. As an example, the seller may specify that the seller proxies are to be performed with increasing frequency as the vehicle auction progresses in time.

The auction center 106 contains one or more vehicle auctions submitted by one or more sellers. Each vehicle auction includes an auctioning of one vehicle. Some of the sellers requested seller proxies to be performed by the auction center 106 for their vehicle auctions. Other sellers did not request seller proxies to be performed on their behalf. The seller proxy module, at the time of execution, has to determine the vehicle auctions that requested seller proxies, and perform the seller proxies on behalf of the seller.

In one embodiment, the seller proxy module can determine the vehicle auctions that requested seller proxies by using a seller proxy list maintained in memory. The seller proxy list identifies vehicle auctions that are currently in the active state and that have requested seller proxies to be performed. For example, if the seller specifies a decrement amount greater than zero (0), the vehicle auction can be included in the seller proxy list at substantially the time the vehicle auction becomes active. The seller proxy module then takes the vehicle auctions identified in the seller proxy list one at a time and performs the seller proxies on behalf of the seller. If, in performing the seller proxy, the seller proxy module determines that subsequent seller proxies cannot be performed in the vehicle

5 auction, the vehicle auction is removed from the seller proxy list. As one example, if the seller proxy module determines that a vehicle auction has received a bid, then the vehicle auction can be removed from the seller proxy list. As another example, if the start minimum bid is not greater than the low minimum bid for a vehicle auction, the vehicle auction can be removed from the seller proxy list. As still another example, if the vehicle auction no longer is in the active state, then the vehicle auction is removed from the seller proxy list.

10 In another embodiment, the auction center 106 may use a default decrement amount such as \$100. In this instance, the seller can request seller proxies to be performed by specifying a different value for the start minimum bid and the low minimum bid for a vehicle auction. For example, the seller can request seller proxies by setting the low minimum bid lower than the start minimum bid. The vehicle auction can then be included in the seller proxy list upon becoming active. Vehicle auction states will be further discussed below.

15 In one embodiment, the seller advantageously provides additional product data such as, by way of example, a vehicle condition and a vehicle title statement. For example, the vehicle condition may be either good, fair, or poor. The vehicle title statement comprises information such as, by way of example, free and clear, odometer rollbacks, and frame damage. In another embodiment, the seller may request an independent third party vehicle appraiser, through the auction center 106, to determine either, or both, the vehicle condition and the vehicle title statement. The third party vehicle appraiser can be pre-selected by the online product auction system administrator to provide this service. The auction center 106 can then contact the appropriate vehicle appraiser and provide the appraiser the information necessary for the appraiser to perform the requested service.

25 At a set offer settings step 208, a seller may advantageously request the auction center 106 to notify the seller based upon one or more seller specified auction events. The auction events may include activities such as, by way of example, a receipt of a bid, a seller proxy, and a vehicle auction state change. Furthermore, the seller can specify the method of notification. As an example, the seller can request the auction center 106 to notify the seller by a means such as e-mail, page, fax, or phone.

Figure 3 is a flow chart generally illustrating the vehicle auction states according to one embodiment of the invention. In this embodiment, a vehicle auction is established for each vehicle submitted for auction by a seller. When the auction center 106 creates a vehicle auction, the vehicle auction is initially assigned to a vehicle auction review state at a step 302. During the review state, the auction center 106 may advantageously permit the seller to modify the seller's vehicle auction including removing the vehicle auction from the auction center 106. For example, the seller can modify some or all of the product data and the seller parameters associated with the vehicle auction. In one embodiment, the auction center 106 does not make the vehicle auction available to potential bidders while it is in the review state. Accordingly, potential bidders may not submit bids in the vehicle auction while it remains in a review state. In another embodiment, the auction center 106 may make some of the information associated with a vehicle auction in a review state available to potential bidders. As an example, the auction center 106 might provide information that gives an indication of a number of vehicle auctions for a specific model vehicle which are upcoming. The potential bidders may then plan for the upcoming vehicle auctions.

In one embodiment, the vehicle auction remains in the vehicle auction review state until the subsequent 8:00 A.M. local time. The local time is advantageously the time in the time zone at the seller's location. Thus, if a seller located in New York submits a vehicle auction, the auction center 106 performs time calculations according to the time zone for New York. As an example, if a vehicle auction was established at 7:50 A.M. local time, the vehicle auction will remain in the review state until 8:00 A.M. local time, or for the next ten (10) minutes. In another example, if a vehicle auction was established at 8:01 A.M. local time on a Monday, the vehicle auction will remain in the review state until 8:00 A.M. local time of the following Tuesday. In another embodiment, the auction center 106 may permit the seller to specify a review-to-preview state transition time, the time when the seller's vehicle auction changes from the review state to a subsequent state. In yet another embodiment, the auction center 106 can perform appropriate time calculations based on a single predetermined time zone such as the time zone appropriate for the location of the online product auction system 104.

At a step 304, the auction center 106 transitions the state of a vehicle auction from

a review state to a preview state at substantially the subsequent 8:00 A.M. local time. For example, a vehicle auction submitted by a seller in New York at 2:00 A.M. Monday will transition to a preview state at 8:00 A.M. Monday, New York time. A vehicle auction submitted by a seller located in London England at 7:00 P.M. Monday will transition to a preview state at 8:00 A.M. Tuesday, London time. In another embodiment, if the auction center 106 permits the seller to specify the review-to-preview state transition time for a vehicle auction, the auction center 106 can change the state of the vehicle auction at the time specified by the seller.

In one embodiment, a vehicle auction becomes visible to, and accessible by, potential bidders through the online product auction system 104 upon transitioning from a review state to a preview state. In one embodiment, the potential bidders are the vehicle dealers having access to the Data Center system detailed in the co-pending and commonly owned U.S. Patent application entitled REAL TIME COMMUNICATION OF PURCHASE REQUESTS having the application number 09/231,049 and the filing date of January 14, 1999, and which is hereby incorporated by reference in its entirety. Upon transitioning into the preview state, the vehicle auction advantageously remains in the preview state for six (6) twenty-four (24) hour periods. The auction center 106 is advantageously configured to not accept seller modifications to the product data or the seller parameters associated with a vehicle auction that is beyond the review state. Moreover, the seller may advantageously not be permitted to remove a vehicle auction that is beyond the review state from the online product auction system 104. In another embodiment, the auction center 106 may permit the seller to modify seller parameters in order to request seller proxies even if the vehicle auction is beyond the review state.

The auction center 106 makes certain information associated with a vehicle auction in a preview state available to potential bidders. As an example, the auction center 106 may advantageously make available vehicle identifying information and a start minimum bid to enable a potential bidder to decide whether to submit a bid in the vehicle auction. In one embodiment, the bids accepted by the auction center 106 for a vehicle auction in a preview state can be treated as secret bids. A secret bid can also be referred to as a sealed bid, and is a bid that remains hidden, and thus, not visible or accessible by other potential bidders. Therefore, a potential bidder does not have access to previous bid information for

the vehicle auction in a preview state. In another embodiment, a secret bid can be concealed from the seller. In still another embodiment, a bidder may advantageously be permitted to remove a previously submitted secret bid as long as the vehicle auction for which the bid was submitted is currently in the preview state.

5           Those of ordinary skill in the art will realize that the period of time a vehicle auction remains in the preview state is arbitrary, and the period of time may be any period of time sufficiently long enough to permit potential bidders to adequately consider bidding on a vehicle offered in a vehicle auction. The auction center 106 permits a potential bidder adequate time to determine whether or not to bid in a vehicle auction irrespective of the  
10           bidders location. In another embodiment, the auction center 106 may permit the seller to specify a preview duration time, the time a vehicle auction is to remain in a preview state before becoming active.

          At a step 306, the auction center 106 transitions the state of a vehicle auction from a preview state to an active state. In one embodiment, a vehicle auction transitions to an  
15           active state at substantially the termination of the sixth (6<sup>th</sup>) twenty-four (24) hour period in which a vehicle auction was in a preview state. The vehicle auction advantageously remains in the active state for a twenty-four (24) hour period. In another embodiment, the transition can occur at the termination of the preview duration time supplied by a seller. Those of ordinary skill in the art will realize that the period of time a vehicle auction  
20           remains in the active state is arbitrary, and the period of time may be any period of time sufficiently long enough to provide a vehicle auction a fair chance of resulting in a sale of the vehicle.

          The auction center 106 determines a current high bid for a vehicle auction at substantially the time the vehicle auction transitions to an active state. The current high  
25           bid is determined from the secrets bids received while the vehicle auction was in the preview state. If no secret bids were received, the current high bid is set to zero (0). The auction center 106, in addition to the vehicle auction information made available while in the preview state, can additionally make the current high bid for the active vehicle auction available to potential bidders. Thus, a potential bidder may informatively submit a bid that  
30           has a potential of becoming the current high bid. Furthermore, some or substantial portions of the information relating to the bids received by an active vehicle auction may



advantageously be made available to potential bidders while the vehicle auction is active. For example, the number of bids received in the vehicle auction, the number of proxy bids received in the vehicle auction, and the current high bid may be made available to potential bidders upon request. In another embodiment, some or substantial portions of the secret bids received by a vehicle auction may also be made available to potential bidders while the vehicle auction is active.

At a step 308, a vehicle auction transitions to a closed state at the termination of the active state. The auction center 106 then determines a winning bid and a winning bidder for the vehicle auction. The winning bid is the current high bid at the termination of the vehicle auction active state. The winning bidder is the bidder associated with the winning bid. The auction center 106 preferably notifies both the seller and the winning bidder. The notification can be by methods such as, by way of example, e-mail, fax, telephone, or page. In one embodiment, the method of communication can be previously specified by the seller and the winning bidder.

In another embodiment, the auction center 106 may provide a seller an option of requesting third party escrow services. The online product auction system 104 can previously arrange for one or more third party escrow service providers to perform escrow services in consummating a sale of a vehicle. In one embodiment, an escrow module is configured to execute in the auction center 106. If the seller specifies the desire to employ the services of an escrow service, the escrow module can notify the appropriate escrow service provider of the vehicle auction, including information such as, by way of example, the seller and the buyer. In one embodiment, the escrow service provider may be determined based on the location of the seller. The notification can be via predetermined methods such as, by way of example, e-mail, electronic document exchange, fax, phone, and page. Once notified, the escrow service provider can proceed to consummate the exchange of the vehicle for the winning bid amount. The escrow service provider can then notify the online product auction system 104 of the result of the escrow services. In another embodiment, an independent escrow service provider, or a trusted third party, can hold the vehicle, along with the necessary ownership documentation, during the vehicle auction to promote confidence in the vehicle auction.

In one embodiment, a sale finalize module can be configured to execute in the

5 auction center 106. The sale finalize module can remove the vehicle auction from the auction center 106 if the escrow service was successful. If the escrow service was unsuccessful, or if escrow service was not selected, the sale finalize module may contact the seller to determine whether the vehicle auction can be removed from the auction center 106.

10 In one preferred embodiment, the operation of the online product auction system 104 comprises the following events. On April 1, 1999, at substantially 4:00 P.M. Irvine time, a seller located in Irvine, California, submits a 1970 Pinto to be auctioned off by the auction center 106. Along with the submission of the Pinto, the seller also specifies a start  
15 minimum bid of \$500, a reserve bid of \$400, a decrement amount of \$50, and a low minimum bid of \$300. The auction center 104 creates a unique vehicle auction for this Pinto and initially sets the vehicle auction to a review state. While the vehicle auction is in the review state, the seller is able to make any modifications to the vehicle auction information including, but not limited to, removing the vehicle auction from the auction  
20 center 106. The vehicle auction is not made public, and thus, is not visible, to potential bidders while it is in a review state.

On April 2, 1999, at substantially 8:00 A.M. Irvine time, the auction center 106 transitions the vehicle auction from the previous review state to a preview state. While in the preview state, the vehicle auction becomes public. Potential bidders are provided  
25 product information regarding the Pinto along with the seller requested start minimum bid of \$500. Thus, a potential bidder will know that the seller of the Pinto is requesting that the bidding be started at \$500. While the vehicle auction is in a preview state, the seller is advantageously not permitted to modify any seller parameters. In another embodiment, a seller who\*did not previously request seller proxies may advantageously be permitted to  
30 request seller proxies while the vehicle auction is in the preview state by specifying a decrement amount and a low minimum bid.

Potential bidders are advantageously permitted to bid on the vehicle auction while it is in the preview state. At 10:00 A.M. Irvine time on April 2, 1999, a first bidder submits a bid in the vehicle auction by specifying an initial bid of \$500 and a top bid of  
35 \$700. At 11:00 A.M. on the same day, a second bidder submits a bid in the vehicle auction by specifying an initial bid of \$500 and a top bid of \$800. By specifying a

different figure for the initial bid and the top bid, both the first bidder and the second bidder are requesting that proxy bids be generated on each bidder's behalf. The auction center 106 is advantageously configured to generate proxy bids in increments of \$50 for the vehicle auction. The bids submitted in a vehicle auction in a preview state are treated  
5 by the auction center 106 as secret bids and thus, is not made known to other potential bidders. Therefore, the second bidder would not have known about the first bidder's bid.

Substantially at 8:00 A.M. on April 8, 1999, Irvine time, the auction center 106 transitions the state of the vehicle auction from the previous preview state to an active state. Substantially at this time, the auction center 106 determines a current high bid for  
10 the vehicle auction. The current high bid is determined from the secret bids received while the vehicle auction was in the preview state. The current high bid for the Pinto auction will belong to the second bidder and be set to \$750. The current high bid figure of \$750 is made available to potential bidders while the vehicle auction is in the active state. Furthermore, the auction center 106 performs seller proxies when the vehicle auction is in  
15 the active state and no bids have been received in the vehicle auction. Because a bid was received during the previous portion of the vehicle auction, the requested seller proxies will advantageously not be performed after the vehicle auction transitions to the active state.

If no secret bids were received, the current high bid for the Pinto auction would be  
20 set to \$0. In this instance, the auction center 106 will advantageously perform a seller proxy by decrementing the start minimum bid of \$500 by the decrement amount of \$50. The seller proxy will be performed for this vehicle auction once every hour until a bid has been received or the seller proxy will result in the start minimum bid being set to an amount lower than the specified low minimum bid of \$300. For example, at 9:00 A.M. on  
25 April 8, 1999, assuming no bids were received in the vehicle auction, the auction center 106 will advantageously perform a seller proxy and decrement the start minimum bid by \$50 and set it to \$450. Subsequent to this time, the potential bidders will be informed that the start minimum bid for this vehicle auction is \$450.

While the vehicle auction is active, potential bidders are able to submit bids for the  
30 vehicle in the vehicle auction. At 1:00 P.M. on April 8, 1999, Irvine time, a third bidder sees that the current high bid for the Pinto is \$750. Thus, the third bidder submits a bid for

the Pinto specifying an initial bid of \$800 and a top bid of \$900. Substantially at this time, the auction center 106 again calculates the current high bid for the Pinto auction. The newly determined current high bid will belong to the third bidder and be set to \$850. The second bidder will no longer be considered because the second bidder's top bid of \$800 is not sufficient to exceed the newly calculated current high bid of \$850. The third bidder would not have known that the second bidder had requested a proxy bid, in the maximum amount of \$800, to be performed on the second bidder's behalf.

Substantially at 8:00 A.M. on April 9, 1999, Irvine time, the auction center 106 will close the Pinto auction by transitioning the vehicle auction state from the previous active state to a closed state. Substantially at this time, the auction center 106 determines a winning bid and a winning bidder. For the Pinto auction, the third bidder is the winning bidder with a winning bid of \$850. Because the \$850 is larger than the seller's reserve bid of \$400, the seller is obligated to sell the Pinto to the third bidder for the winning bid of \$850. The auction center 106 advantageously contacts both the seller and the third bidder and provides the necessary information to facilitate the transfer of the Pinto for the money.

In one embodiment, a potential bidder utilizes a web browser executing on a buyer terminal to obtain access the auction center 106 login web page. The potential bidder can then access the auction center 106 by submitting a login identification and password pair through the login web page. The login identification and password pair may be obtained by a method substantially similar to the previously discussed method in which a seller may obtain a login identification and password pair.

A bid processing module is configured to execute in the auction center 106. The bid processing module is further configured to receive one or more bids from one or more bidders and to associate the bid to the submitting bidder. The bid processing module can advantageously associate the bid to the submitting bidder by utilizing the login identification used by the bidder to obtain access to the auction center 106. A bidder is a potential purchaser of a vehicle offered in a vehicle auction. In one embodiment, the bidder may advantageously be a person or entity licensed by a governmental agency, such as the Department of Motor Vehicles, to deal in the buying, selling, and reselling of one or more vehicles.

In one embodiment, a bid data comprises a bid and may advantageously include an

initial bid and a top bid. The auction center 106 can require the top bid to be as large as the initial bid. The initial bid is the bidder's starting bid or the floor bid. The top bid is the bidder's maximum bid or the ceiling bid. The auction center 106 may have advantageously predetermined a proxy increment. The proxy increment is a figure the bid processing module can use in submitting a proxy bid on a bidder's behalf. In one embodiment, the bid processing module can use a proxy increment of \$50 in performing a proxy bid in a vehicle auction. As an example, in a vehicle auction, a first bidder can submit a bid containing an initial bid of \$5,000 and a top bid of \$6,000. At this point, a current high bid can be set to \$5,000. Because the top bid is larger than the initial bid, the first bidder is requesting proxy bids to be performed on the bidder's behalf. A subsequent bidder may then submit a subsequent bid containing an initial bid of \$5,100 and a top bid of \$5,500. The bid processing module can then submit a proxy bid on behalf of the first bidder in the amount of \$5,550. The current high bid subsequently becomes \$5,550. In another embodiment, the auction center 106 can require bid figures to be in amounts that are multiples of the proxy increment. Advantageously, the bid processing module may also permit the bidder to specify a proxy increment for use by the bid processing module in submitting proxy bids on the bidder's behalf. In yet a further embodiment, the seller may specify a proxy increment that is to be used in submitting proxy bids in the seller's vehicle auction. For example, the seller can specify that for the seller's vehicle auction, all proxy bids are to be in increments of \$10.

Figure 4 is a flow chart generally illustrating a calculation of a current high bid in a vehicle auction transitioning from a preview state to an active state according to one embodiment of the invention. This calculation of the current high bid is performed by the bid processing module substantially at the time the vehicle auction transitions to the active state. At a step 402, the bid processing module determines whether there are any bids submitted in the vehicle auction. The bids would be the secret bids which were accepted by the auction center 106 while the vehicle auction was in the preview state. If there are no secret bids for the vehicle auction, a current high bid is set to \$0 and a proxy ceiling is set to \$0 at a step 404. The bid processing module then proceeds to a step 414 and terminates processing the secret bids.

If the bid processing module determined there were one or more secret bids at the

step 402, the bid processing module obtains the first bid data for the first secret bid at a step 406. In one embodiment, the bid data includes an initial bid and a top bid. If the bidder failed to specify either the initial bid or the top bid, the bid processing module can set the unspecified bid to the specified bid amount. As an example, if the bidder specified an initial bid of \$10,000 and did not specify a top bid, the top bid can be set to \$10,000. At a step 408, a current high bid is set to the initial bid. In another embodiment, if a top bid specified by a bidder is smaller than an initial bid specified by the bidder, the bid processing module may set the top bid to the initial bid. In still another embodiment, the bid processing module may set the current high bid to the vehicle auction's start minimum bid specified by the seller upon determining that the initial bid is larger than the start minimum bid. The bid processing module then sets a proxy ceiling to the top bid at a step 410. The proxy ceiling is the maximum amount the current high bidder is willing to bid for the vehicle. A proxy bid cannot be generated on behalf of the current high bidder that exceeds the proxy ceiling.

At a step 412, the bid processing module determines if there are more secret bids to process for the vehicle auction. If there are no more secret bids to process, the bid processing module proceeds to the step 414 and terminates processing the secret bids. If there are more secret bids to process, the bid processing module proceeds to a step 416 and continues processing the subsequent secret bids one at a time. In one embodiment, the processing logic can be the same as the logic implemented for processing bids received while a vehicle auction is in an active state as illustrated in Figure 5. The logic outlined in Figure 5 processes a single subsequent bid. Therefore, after processing a subsequent secret bid as generally outlined in Figure 5, the bid processing module loops back to the step 412 and determines if there are more secret bids to process. If there is, the logic generally outlined in Figure 5 is again executed to process the next subsequent secret bid. This loop is repeated until all secret bids have been processed. When all secret bids have been processed, the bid processing module proceeds to the step 414 and terminates processing the secret bids.

Figure 5 is a flow chart generally illustrating a calculation of a current high bid in an active vehicle auction according to one embodiment of the invention. At a step 502, the bid processing module receives a bid data for a new bid in the vehicle auction. At a step

504, the bid processing module determines whether the new bid's top bid is larger than the proxy ceiling. The proxy ceiling was previously determined, at the time the vehicle auction transitioned from the preview state to the active state (refer to the discussion above for Figure 4), to be either \$0 or the top bid associated with the current high bid. By  
5 utilizing the larger than inequality above, the bid received first in time is given priority if both bids specified the same top bid. In one embodiment, the auction center 106 can associate a receive time for each bid data.

If the new bid's top bid is not larger than the proxy ceiling, the bid processing module determines if the new bid's top bid is larger than the current high bid at a step 505.  
10 If the auction center 106 does not accept subsequent bids smaller than the current high bid, the check performed at the step 505 may be unnecessary. If the new bid's top bid is determined to be larger than the current high bid at the step 505, the current high bid is set to the sum of the new bid's top bid and a proxy increment at a step 506. The bid processing module then determines whether the current high bid is larger than the proxy  
15 ceiling at a step 508. If it is, then the current high bid is set equal to the proxy ceiling. Thus, the current high bid may not exceed the current high bidder's top bid. The bid processing module then proceeds to a step 520 and finishes processing. If the current high bid was determined to be not larger than the proxy ceiling at the step 508, or the new bid's top bid was determined to be not larger than the current high bid at the step 505, the bid  
20 processing module proceeds to the step 620 and finishes. In another embodiment, the bid processing module can determine if the new bid's top bid is larger than the sum of the proxy ceiling and the proxy increment at the step 504. In this instance, the auction center 106 may require a subsequent high bid to be larger than a prior high bid by at least the proxy increment.

25 If the bid processing module determined that the new bid's top bid was larger than the proxy ceiling at the step 504, the current high bid is set to the sum of the proxy ceiling and the proxy increment at a step 512. In another embodiment, the bid processing module may set the current high bid to the new bid's initial bid if the proxy ceiling is \$0, thus indicating that the new bid is the first bid received in the vehicle auction. In yet another  
30 embodiment, the bid processing module may set the current high bid to the seller specified start minimum bid if the proxy ceiling is \$0, and the new bid's initial bid is larger than the

start minimum bid. The bid processing module then determines whether the current high bid is larger than the new bid's top bid at a step 514. If it is, then the current high bid is set to the new bid's top bid at a step 516. The bid processing module then sets the proxy ceiling to the new bid's top bid at a step 518 and then finishes at the step 520. If the  
5 current high bid was not larger than the new bid's top bid at the step 514, the bid processing module proceeds to the step 518.

In one embodiment, a bidder can request a bid event notification from the auction center 106. The request can be made at substantially the time of submitting a bid in a vehicle auction. The bid event notification can be based on one or more bid events  
10 specified by the bidder. A bid event is an event such as, by way of example, the bidder's bid being out bid, the bidder's bid being determined a winning bid, and a proxy bid being performed on the bidder's behalf. The bidder may specify the method of notification at the time of submitting the bid. The bidder may specify notification methods such as e-mail, fax, telephone, or page. In another embodiment, the bidder may request a bid event  
15 notification subsequent to submitting the bid for which notification is sought.

In one embodiment, a bid data can include a bid event notification request. Whenever the bid data is affected, the auction center 106 can determine if one or more notifications needs to be performed. In another embodiment, the auction center 106 can associate bid event notification requests with the associated vehicle auction. For example,  
20 each vehicle auction can be associated to a list of bid event notification requests. Thus, when an event occurs in the vehicle auction, the auction center 106 can access the list of bid event notification requests to determine if any notifications need be performed.

In one embodiment, a potential bidder may advantageously request notification of one or more vehicle auctions from the auction center 106. The potential bidder may  
25 specify one or more auction search criteria such as, by way of example, vehicle type, vehicle model, vehicle make, vehicle condition, and vehicle location. The potential bidder may additionally specify a notification method such as, by way of example, e-mail, telephone, fax, or page. The auction center 106 can maintain the vehicle auction notification request in a vehicle auction notification database. In one embodiment,  
30 whenever a vehicle auction transitions to a preview state, the auction center 106 can search the database to determine if any notifications need to be performed.



In one embodiment, a login module is configured to execute in the auction center 106. The login module is advantageously comprised of one or more web page definitions, and advantageously displays a first web page on a user terminal. The login module requests through the first web page a login identification and password pair. A user, either  
5 a potential bidder or a potential seller, can access the auction center 106 by providing a valid login identification and password pair. The online product auction system 104 is configured to display auction data regarding one or more vehicle auctions on the user terminal.

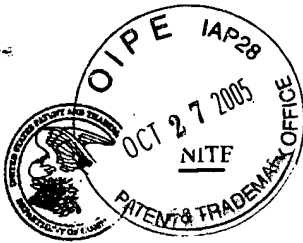
The auction data includes information regarding one or more vehicle auctions in  
10 the auction center 106. The auction data may advantageously be displayed as one or more URL links to one or more web pages providing access to the vehicle auction. The auction data can be displayed in a scrolling ticker, similar to a stock market ticker, appearing in a portion of the one or more web pages comprising the auction center 106. The scrolling ticker displaying the URL links may advantageously be implemented utilizing the  
15 freeware program "ticker.class." This program takes as input contents of a text file containing one or more text strings and its associated URLs. The program reads the text strings contained in the text file, and displays the text string contents in a scrolling ticker as a selectable hypertext link enabling access to a web page addressed by the associated URL.

In one embodiment, a user, having logged on to the auction center 106, can request  
20 the auction center 106 to display the scrolling ticker containing the auction data. The user may specify one or more parameters that the auction center 106 can use in filtering the content of the scrolling ticker. As an example, the user may specify parameters such as vehicle type, one or more specified vehicle auctions, vehicle auction region, and bid-by-bid display. The auction center 106 can search for the vehicle auctions satisfying the one  
25 or more filtering parameters. The auction center 106 can dynamically modify the text file used by ticker.class to include the results of the search. The results of the search can advantageously be displayed in the scrolling ticker.

In another embodiment, the auction data may be displayed on a vehicle dealer terminal. The auction data may advantageously be stored on one or more storage mediums  
30 108. The vehicle dealer terminal is a terminal used by a vehicle dealer to access the Data Center system. In this embodiment, the vehicle dealer can be a seller or a potential bidder

in the online product auction system 104. Having accessed the Data Center system, the Data Center system can display on the vehicle dealer terminal a scrolling ticker containing information regarding the one or more vehicle auctions contained in the auction center 106. The vehicle dealer can advantageously filter the contents of the scrolling ticker as described above. Furthermore, the storage mediums 108 may advantageously be the storage mediums detailed in the co-pending and commonly owned U.S. Patent application entitled REAL TIME COMMUNICATION OF PURCHASE REQUESTS having the application number 09/231,049 and the filing date of January 14, 1999, and which is hereby incorporated by reference in its entirety. The Data Center system and vehicle dealer are also detailed in the co-pending and commonly owned U.S. Patent application previously mentioned. In particular, the storage medium becomes the linking element between the Data Center and the auction center. Thus the dealers participating in the Data Center may advantageously participate in one or more vehicle auctions by submitting one or more vehicles from inventory to the auction center and by bidding in one or more vehicle auctions conducted by the auction center.

This invention may be embodied in other specific forms without departing from the essential characteristics as described herein. The embodiments described above are to be considered in all respects as illustrative only and not restrictive in any manner. The scope of the invention is indicated by the following claims rather than by the foregoing description.



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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/283,120      | 03/31/1999  | KEVIN J. WAGONER     | AUTOB.059A          | 9530             |

20995 7590 05/28/2004

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EXAMINER

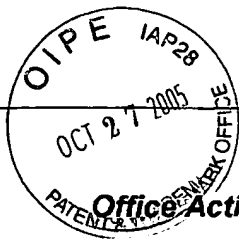
KAZIMI, HANI M

ART UNIT PAPER NUMBER

3624

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



# Office Action Summary

Application No.

09/283,120

Applicant(s)

WAGONER ET AL.

Examiner

Hani Kazimi

Art Unit

3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 38-40, 53 and 54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38-40 is/are rejected.
- 7) ☐ Claim(s) 53 and 54 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This communication is in response to Applicant's amendment filed on November 3, 2003.

#### ***Status of Claims***

2. Claims 1-52 are pending in this application, claims 1-37 and 41-52 have been withdrawn from consideration because of the restriction requirement. Claims 1-37, and 41-52 have been canceled, and claims 38, and 40 have been amended in the amendment filed on June 1, 2003. In the amendment filed on November 3, 2003, claims 38, and 40 have been amended, and claims 53, and 54 have been added. Therefore, claims 38-40, 53, and 54 are under prosecution in this application. *The Applicant is respectfully required to cancel claims 1-37 and 41-52 in response to this office action.*  
The rejections cited are as stated below:

#### ***Summary of Office Action***

3. Applicants' arguments filed on November 3, 2003 and with respect to claims 38-40 have been fully considered, and discussed in the next section below or within the following rejections under 35 U.S.C. § 102 are not deemed to be persuasive. However, Applicants' arguments with respect to claims 53, and 54 have been fully considered, and discussed below are deemed to be persuasive. Therefore, claims 38-40 are

rejected as being unpatentable over the art cited below, and Applicant's request for allowance is respectfully denied.

***Response to Applicants' Amendment***

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371<sup>9</sup> of this title before the invention thereof by the applicant for patent.

5. Claims 38-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Fisher et al. US Pat. No. 5,835,896 as discussed in paragraph 5 of paper No. 23.

Further: Fisher teaches a current high bid value for a first product (figure 3), the first bid is greater than said current high bid value, and second bid is greater than said first bid, and the third bid is greater than said current high bid value, and said fourth bid is greater than third bid (proxy bids, figure 7, element 69, and column 7, line 1 thru column 10, line 28).

***Allowable Subject Matter***

6. Claims 53, and 54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

7. Applicant's arguments filed November 3, 2003 have been fully considered but they are not persuasive. The response to Applicant's argument is addressed in the above rejection.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hani Kazimi whose telephone number is (703) 305-1061. The examiner can normally be reached Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached at (703) 308-1065.

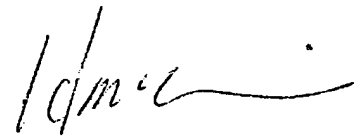
Application/Control Number: 09/283,120

Page 5

Art Unit: 3624

The fax number for Formal or Official faxes and Draft or Informal faxes to Technology Center 3600 or this Art Unit is (703) 305-7687 or 7658.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113 or 1114.

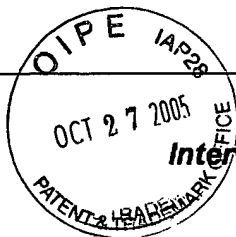


**HANI M. KAZIM**  
**PRIMARY EXAMINER**

Art Unit 3624

May 17, 2004





## Interview Summary

|                               |                                |  |
|-------------------------------|--------------------------------|--|
| Application No.<br>09/283,120 | Applicant(s)<br>WAGONER ET AL. |  |
| Examiner<br>Hani Kazimi       | Art Unit<br>3624               |  |

All participants (applicant, applicant's representative, PTO personnel):

(1) Hani Kazimi.

(3) Ted Cannon.

(2) Arthur Rose.

(4) \_\_\_\_\_.

Date of Interview: 07 October 2003.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 38-40.

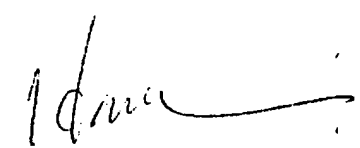
Identification of prior art discussed: Fisher et al.

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Fisher reference was discussed with respect to the claimed invention, the reference teaches the claimed limitations as discussed in the previous office action. However, Applicant will submit a proposed amendment including additional features that are not disclosed by Fisher reference. The Examiner will conduct an updated search in response to Applicant's amendment.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

  
HANI M. KAZIMI  
PRIMARY EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

\_\_\_\_\_  
Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

**Appl. No.** : **09/283,120**  
**Filed** : **March 31, 1999**

**APPENDIX C: DECISIONS IN RELATED APPEALS AND INTERFERENCES**

Applicants have not provided copies of court or Board decisions from any related appeals or interferences because Applicants are unaware of any related appeals or interferences.

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